

What is claimed is:

1. A wireless LAN access point comprising:
 - a directional antenna;
 - an interference detector detecting interference effected by another wireless LAN access point on said directional antenna; and
 - a direction adjusting mechanism adjusting a maximum gain direction of said directional antenna in response to said detected interference.
2. The wireless LAN access point according to claim 1, further comprising a control unit determining an optimized direction in response to the detected interference,
 - 5 wherein said direction adjusting mechanism adjusts a maximum gain direction of the directional antenna to the optimized direction, and
 - wherein said control unit determines said optimized direction such that said directional antenna is free from said interference effected by said other wireless LAN access point.
3. The wireless LAN access point according to claim 2, wherein said interference detector detects a strength of said interference from said other wireless LAN access points, and

5 wherein said controller unit determines
said optimized direction in response to said
detected strength of said interference.

4. A wireless LAN access point comprising:
a directional antenna;
an omnidirectional antenna;
a signal processor;
5 a selector unit selecting one of said
directional antenna and said omnidirectional
antenna in response to interference from other
wireless LAN access points, wherein said selector
unit provides electrical connections between said
10 signal processor and said selected antenna,
wherein said signal processor receives and
transmits radio signals through said selected
antenna.

5. The wireless LAN access point according to
claim 4, further comprising an interference
detector detecting said interference, and
wherein, in response to detection of said
5 interference during reception and transmission of
said radio signals through said omnidirectional
antenna, said selector unit disconnects said
omnidirectional antenna from said signal
processor, and connects said directional antenna

10 to said signal processor.

6. The wireless LAN access point according to
claim 5, further comprising:

a controller unit determining an optimized
direction in response to a strength of said
5 interference; and

a direction adjusting mechanism adjusting
an maximum gain direction of said directional
antenna to said optimized direction.

7. A wireless LAN access point comprising:

a plurality of directional antennas having
different maximum gain directions;

an antenna controller adapted to activate
5 and deactivate said plurality of directional
antennas; and

an interference detecting unit detecting
interference effected by other wireless LAN
access point on said plurality of directional
10 antennas,

wherein said antenna controller deactivates
one of said plurality of directional antennas on
which said interference is effected, while
activating another of said plurality of
15 directional antennas which is free from said
interference.

8. A wireless LAN system comprising:

a plurality of wireless LAN access points,
each of which includes:

a directional antenna, and

5 a direction adjusting mechanism

connected to said directional antenna; and

an antenna controller determining an
optimum direction of each of said directional
antennas,

10 wherein each of said direction adjusting
mechanisms adjusts a maximum gain direction of
said directional antennas associated therewith to
said optimum direction determined by said antenna
controller.

9. The wireless LAN system according to claim

8, wherein said antenna controller determines

said optimum directions of said directional

antennas such that communicable areas of said

5 plurality of wireless LAN access points do not
overlap one another.

10. A wireless LAN access point comprising:

an interference detector detecting
interference effected by other wireless LAN
access points;

5 a channel selector switching a plurality of channels used to communicate with a terminal; and
 a signal processor,

 wherein, in response to detection of interference on one of said plurality of channels
10 during communications through said one channel,
 said channel selector selects another channel from among said plurality of channels which receives least interference from said other wireless LAN access points, and

15 wherein said signal processor communicates with said terminal through said selected channel.

11. A method for avoiding interference between wireless LAN access points, comprising:

 detecting interference between first and second wireless LAN access points; and

5 moving an electromagnetic shield between said first and second wireless LAN access points in response to occurrence of said interference.

12. The method according to claim 11, wherein said electromagnetic shield includes a shield plate, and said method further comprises:

 arranging said shield plate such that a
5 main surface of said shield plate is parallel to a direction of an electromagnetic wave from said

first wireless LAN access point in response to nonoccurrence of said interference.

13. The method according to claim 11, wherein said electromagnetic shield includes a shield plate, and said method further comprises:

laying down said shield plate onto a floor
5 in response to nonoccurrence of said interference.

14. A method for operating a wireless LAN access point including a directional antenna, said method comprising:

detecting interference effected on said
5 directional antenna by another wireless LAN access point;

determining an optimized direction in response to said detected interference; and

adjusting a gain maximum direction to said
10 optimized direction so that said directional antenna is free from said interference.

15. A method for operating a wireless LAN access point including a directional antenna, said method comprising:

detecting a strength of interference
5 effected on said directional antenna by another wireless LAN access point;

determining an optimized direction in response to said detected strength of said interference; and

10 adjusting a gain maximum direction to said optimized direction.

16. A method for operating a wireless LAN access point including directional and omnidirectional antennas, said method comprising:

selecting one of said directional and
5 omnidirectional antennas; said selected one being to be used for communications, wherein said directional antenna is selected in response to detection of interference from another wireless LAN access point during use of said
10 omnidirectional antenna.

17. The method according to claim 16, further comprising:

determining an optimized direction in response to a strength of said interference; and
5 adjusting a gain maximum direction of said directional antenna to said optimized direction.

18. A method for operating a wireless LAN access point including a plurality of directional antennas having different gain maximum directions,

said method comprising:

5 determining whether said plurality of
directional antennas respectively receive
interference from another wireless LAN access
point;

10 deactivating one(s) of said plurality of
said directional antennas; said one(s) receiving
said interference; and

 achieving communications through remaining
one(s) of said plurality of said directional
antennas.

19. A method for operating a wireless LAN
access point adapted to communicate with a
wireless LAN adapter through a plurality of
channels, said method comprising:

5 detecting interference from another
wireless LAN access point;

 selecting one channel from among said
plurality of said channels so that said selected
channel eliminates or minimizes said
10 interference; and

 achieving communications with said wireless
LAN adapter through said selected channel.